REMARKS

The application includes claims 1-12 prior to entering this amendment.

The examiner rejects claims 1-3, 5-10, and 12 under 35 U.S.C. § 102(b) over Porter (U.S. Patent 5,515,372).

The examiner rejects claim 11 under 35 U.S.C. § 103(a) over Porter.

The examiner rejects claim 4 under 35 U.S.C. § 103(a) over Porter in view of Ohnishi (U.S. Patent 5,682,431).

Applicant amends claims 1-12 and adds new claims 13-24. The application remains with claims 1-24 after this amendment.

Applicant traverses the

Applicant adds no new matter and request reconsideration.

Claim Amendments

Applicant amends claims 1-12 and adds new claims 13-24. Support for the new and amended claims can be found in the application as filed, for example, on pages 4-6, and 9-10. Applicant adds no new matter.

Claim Rejections

The examiner has rejected claims 1-12 over Porter or a combination of Porter and Ohnishi. The following features are not taught or suggested by Porter, or the combination of Porter and Ohnishi:

A. Text data to digitally encoded speech conversion

Claim 1 recites "*a processor configured to receive text data associated with an audio signal and to convert the text data into digitally encoded speech.*" In general terms, the processor is configured to convert the text data into speech. Claims 15 and 23 include similar language.

In rejecting the claims, the examiner indicated that the RDS workstation 22 corresponds to the recited processor.[1] Applicant respectfully disagrees. As can be seen in FIG. 2 of Porter,

[1] Office Action dated 5/18/2007, p. 2.

the output of the RDS workstation 22 is the output of the code group generator 24. The code group generator 24 assembles RDS-format code groups to be broadcast.[2] Nothing in Porter or Ohnishi teach or suggest that the RDS-format eode groups are digitally encoded speech.

Porter describes a receiver that uses TYPE 9 data to select sampled-voice sequences.[3] However, the receiver that is equipped to receive TYPE 9 RDS-format code groups converts the TYPE 9 data into the sampled-voice sequences, not the RDS workstation 22.

Porter describes a tornado alert that is read over the air at 17:22 "using the TA switch 35."[4] Radiotext with the same information is entered at 17:28. First, the spoken tornado alert was made before the radiotext was entered. Thus the spoken tornado alert was not converted from the radio text. Second, the TA switch generates a signal that indicates a traffic announcement so that an RDS capable receiver can interrupt a cassette or CD player so that a driver can hear the traffic announcement.[5] The spoken announcement is not converted from the TA signal.

Ohnishi describes an FM stereo broadcasting apparatus.[6] Ohnishi does not describe the transmission of text data. Accordingly, the combination of Porter and Ohnishi docs not teach or suggest each and every element of claims 1, 15, 23, and dependent claims 2-13, 16, and 24. Applicant requests that the Examiner withdraw the rejection of claims 1-12.

B. Time-domain multiplexing of digitally encoded speech and the audio signal

Claim 6 recites that "*the signal combiner is configured to time-division multiplex the digitally encoded speech and the audio signal to generate the combined signal.*" Parent claim 1 recites "*an FM encoder configured to encode the combined signal according to an FM standard into an FM signal; and a transmitter configured to transmit the FM signal.*" The digitally encoded speech is time-division multiplexed with the audio signal, encoded into an FM signal, and transmitted. Claims 16 and 24 include similar language.

[2] Porter, col. 4, ll. 64-66.
[3] Porter. col. 7, ll. 42-45.
[4] Porter, FIG.2 and col. 8, ll. 63-67.
[5] Porter, col. 2, ll. 24-36.
[6] Ohnishi, col. 4, ll. 11-14.

In Porter, the inputs to the FM stereo encoder 12 are stereo audio program material.[7] There is no suggestion that the inputs to the FM stereo encoder 12 can be a signal that is the combination of the digitally encoded speech and the audio signal.

Even assuming for the sake of argument that the output of the RDS modulator 18 is digitally encoded speech, the output of the RDS modulator 18 is not time-division multiplexed with any other signal before transmission. The output of the RDS modulator 18 is added to the encoded program material from the FM stereo encoder 12.[8] This addition is frequency-division multiplexing. The encoded program material occupies a frequency range from about 0-53 kHz.[9] The RDS subcarrier is centered around 57 kHz.[10] The RDS subcarrier and the encoded program material occupy different frequency ranges, not different time periods. Hence, the output of the RDS modulator 18 is not time-division multiplexed with another signal. In particular, it is not time-division multiplexed with an audio signal.

Porter describes TYPE 9 RDS data that supersedes scheduled RDS services where the scheduled RDS services are delayed rather than lost.[11] Even assuming for the sake of argument that the insertion of the TYPE 9 RDS data and the delaying of the scheduled RDS services is time-division multiplexing, the time-division multiplexing combines RDS data or services, not digitally encoded speech and an audio signal.

As described above, Ohnishi does not describe the transmission of text data, nor the conversion of the text data into digitally encoded speech. Furthermore, Ohnishi does not describe time-division multiplexing of digitally encoded speech and an audio signal. Ohnishi focuses on the transmission of a stereo audio input. Accordingly, the combination of Porter and Ohnishi does not teach or suggest each and every element of claims 6, 16, 24 and dependent claims 7 and 8. Applicant requests that the Examiner withdraw the rejection of claims 6-8.

C. Combination of the digitally encoded speech and the audio signal before FM encoding

Claim 1 recites "*an FM encoder configured to encode the combined signal according to an FM standard into an FM signal; and a transmitter configured to transmit the FM signal.*" The digitally encoded speech is combined with the audio signal, encoded into an FM signal, and

[7] Porter, col. 4, ll. 28-30.
[8] Porter, col. 4, ll. 28-34.
[9] See Ohnishi, FIGS. 2A and 2B, and col. 2, ll. 14-23.
[10] Porter, col. 4, ll. 32-34.

transmitted. Thus, the combination of the digitally encoded speech with the audio signal occurs before the FM encoding.

As described above, Porter only describes audio signals being input the FM stereo encoder 12 with nothing generated from the RDS data being combined before the FM stereo encoding. The combination of signals input to an FM encoder is outside of the scope of Ohnishi. Accordingly, the combination of Porter and Ohnishi does not teach or suggest each and every element of claims 1, 15, 23, and dependent claims 2-13, 16, and 24. Applicant requests that the Examiner withdraw the rejection of claims 1-12.

D. Transmission of both the text data and the digitally encoded speech from the text data

Claim 2 recites that "*the processor is configured to convert the text data according to a radio data system (RDS) standard to generate a modulated RDS signal; and further comprising a second signal combiner configured to combine the modulated RDS signal into the FM signal.*" Thus, the FM transmitter of claim 2 is capable of transmitting the text data both as a modulated RDS signal and as digitally encoded speech. In addition, the digitally encoded speech is combined before FM encoder, while the modulated RDS signal is combined after the FM encoder. Thus, the digitally encoded speech and the modulated RDS signal are at least separate inputs, if not separate signals.

Even assuming for the sake of argument that the output of the RDS modulator 18 of Porter is one of the digitally encoded speech and the modulated RDS signal, Porter still does not describe the other. For example, assuming that the output of the RDS modulator 18 is the modulated RDS signal, there is no other input to the FM transmitter facility of Porter that is generated from any text data. Porter only describes left and right audio signals and a 19 kHz oscillator as other inputs to the FM transmitter facility.[12]

Accordingly, the combination of Porter and Ohnishi does not teach or suggest each and every element of claim 2 and dependent claims 3-5. Applicant requests that the Examiner withdraw the rejection of claims 2-5.

E. Processor of audio device converting text data into the digitally encoded speech

[11] Porter col. 7, ll. 42-48.
[12] Porter, FIG. 1 and col. 5, ll. 37-46.

Claim 9 recites that "*an auxiliary audio device is configured to generate the audio signal; and the processor is a control processor of the auxiliary audio device.*" Hence, the processor that is configured to convert the text data into the digitally encoded speech is a control processor of the source of the audio signal.

In contrast, the RDS workstation 22 of Porter, cited as the processor, is described as distinct from a processor in an audio source, such as a record player, tape player, microphone, or CD player. Accordingly, the combination of Porter and Ohnishi does not teach or suggest each and every element of claim 9 and dependent claims 10 and 11. Applicant requests that the Examiner withdraw the rejection of claims 9-11.

E. Processor of an audio device comprising an RDS modulator, an FM encoder, and/or a signal combiner

Claim 14 recites that "*the receiver is a satellite audio receiver comprising a processor; and at least one of the RDS modulator, the FM encoder, and the signal combiner are implemented in the processor of the satellite audio receiver.*" Similarly, claim 21 recites that "*at least one of the RDS modulator, the FM encoder, and the signal combiner are implemented in the processor [of the handheld audio player].*"

Porter does not suggest having one or more of the RDS modulator, the FM encoder, and the signal combiner implemented in a processor of a satellite audio receiver or a handheld audio player. For example, Porter focuses on a broadcast studio 10.[13] Multiple inputs such as CD players, microphones, tape players, etc. are used. Since any one of these could be the audio input, a separate FM transmitter facility and a separate radio data system are used. Otherwise the selected audio input or the selected RDS data would have to be input back into one of the CD players, microphones, tape players, etc. for encoding or transmission. There is no suggestion of this feedback of the audio inputs or the RDS data. Accordingly, the combination of Porter and Ohnishi does not teach or suggest each and every element of claims 14 and 21.

F. A housing mounting the receiver and at least one of the RDS modulator, the FM encoder, the signal combiner, and the FM transmitter

[13] Porter, col. 4, ll. 26-27.

Claim 17 recites "*a housing in which the receiver and at least one of the RDS modulator, the FM encoder, the signal combiner, and the FM transmitter are mounted.*" Claim 18 recites that "*each of the RDS modulator, the FM encoder, the signal combiner, and the FM transmitter are mounted in the housing.*" Hence, the housing of claim 17 includes the receiver and at least one other component. The housing of claim 18 includes the receiver and all of the listed components.

In contrast, as described above, the FM transmitter facility, the radio data system, and the broadcast studio inputs are all separate entities. There is no suggestion that any are mounted in the same housing with a receiver configured to receive broadcast audio transmissions. Accordingly, the combination of Porter and Ohnishi does not teach or suggest each and every element of claims 17 and 18.

G. Handheld audio player with audio and text data transmitter

Claim 19 is a handheld audio player comprising "*a frequency modulation (FM) transmitter configured to transmit the audio signal and the text data.*"

First, the broadcast studio 10 of Porter is not described as being handheld. Second, the FM transmitter facility is not described as part of the record player, tape player, or CD player 36. The left and right outputs of the audio console 11 are not described as being provided back into an FM transmitter facility that is part of the record player, tape player, or CD player 36.

Ohnishi does not describe in particular where the FM stereo broadcasting apparatus can be implemented. Accordingly, the combination of Porter and Ohnishi does not teach or suggest each and every element of claims 19 and dependent claims 20-24.

Official Notice

The examiner is reminded that "Any rejection based on assertions that a fact is well-known or is common knowledge in the art without documentary evidence to support the examiner's conclusion should be judiciously applied. Furthermore, as noted by the court in Ahlert, any facts so noticed should be of notorious character and serve only to "fill in the gaps" in an insubstantial manner."[14]

[14] MPEP 2144.03 E.

In particular, regarding claim 11, the examiner took Official Notice that a wireless remote control receiver is well known in the art.[15] Assuming for the sake of argument that a generic wireless remote control receiver is well known in the art, the wireless remote control receiver of claim 11 is not of such a notorious character that the examiner is excused from providing documentary evidence to support the examiner's conclusion. In particular, claim 11 recites a "wireless remote control receiver to receive commands to control the auxiliary audio device and to receive commands to select text data to be transmitted in the FM signal." A wireless remote control receiver configured as in claim 11 is not of such a notorious character.

Accordingly, the Applicant traverses all Official Notices and demands that the examiner produce authority for the statements to conform with requirements established under the MPEP and in common law.

Conclusion

For the foregoing reasons, reconsideration and allowance of the pending claims of the application as amended is requested. The examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Customer No. 20575

Respectfully submitted,

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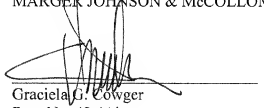

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[15] Office Action dated 5/18/2007, p. 5.